



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,595	04/08/2004	John Sanders	BCS03184	8131
43471	7590	01/10/2008		
Motorola, Inc. Law Department 1303 East Algonquin Road 3rd Floor Schaumburg, IL 60196				
EXAMINER				
ROOT, ROBERT M				
ART UNIT		PAPER NUMBER		
4183				
NOTIFICATION DATE		DELIVERY MODE		
01/10/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com  
APT099@motorola.com

# Office Action Summary

**Application No.**

10/820,595

**Applicant(s)**

SANDERS ET AL.

**Examiner**

ROBERT ROOT

**Art Unit**

4183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-26 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-893)  
Paper No(s)/Mail Date 4-8-2004  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Objections***

1. Claim 8 objected to because of the following informality: Bitstream mis-spelled as bistream. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 14 discloses  $TOM_1$  in the disclosed equation  $TOM_2 - TOM_1 + TS_1 - TS_2$ .  $TOM_1$  has not been defined. Appropriate action is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6, 9-10, 15-18, 20, 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Wine et al (US 6,137,834).
7. As for Claims 1-6, 9-10, and 15 Wine discloses a method of switching a source (Column 2, Lines 48-58) for an information flow (broadly interpreted to include audiovisual program, Column 2, Lines 60-64) configured for distribution among end users (broadly interpreted to

Art Unit: 4183

include a plurality of user terminals, Column 11, Lines 21-34), comprising: receiving a first transport stream (broadly interpreted to include a first real-time digital bitstream, Column 5, Lines 3-18) and a second transport stream (broadly interpreted to include a second real-time digital bitstream, Column 5, Lines 3-18), said source being said first transport stream (Column 4, Lines 47-54); receiving a control signal select (broadly interpreted to include request, Column 5, Lines 3-18) from a controller (broadly interpreted to include remote controller, Column 4, Lines 47-51) operative to switch said source of information flow (broadly interpreted to include said audiovisual program, Column 6, Lines 6-17); switching said source to said second transport stream (Column 5, Lines 3-18) in response to said control signal; adjusting time stamp data (Column 5, Lines 28-41) in the output stream (the selected second stream would become the output stream of the switch, which would end up containing updated time stamp data, Column 5, Lines 28-41) to provide a continuous time base for information flow (Column 5, Lines 28-41); returning said source to first transport stream (Column 5, Lines 3-18); adjusting time stamp data (Column 5, Lines 28-41) in the output stream (the selected first stream would become the output stream of the splicer, which would end up containing updated time stamp data, Column 5, Lines 28-41) to maintain a continuous time base for information flow (Column 5, Lines 28-41); control signal indicates a substitution period (Column 6, Lines 1-33 discusses some scenarios that require switching transport streams which would create a substitution period), and wherein said source is returned to said first transport stream (Column 6, Lines 1-33) upon expiration of substitution period (streams will switch upon detection or absence of an event described in Column 6, Lines 1-33, which broadly would include expiration of a substitution period); the control signal indicates an indefinite substitution period (Column 6, Lines 1-33 discusses some scenarios that require switching transport streams which would create an indefinite substitution

Art Unit: 4183

period), wherein the method further comprises receiving a control signal select (broadly interpreted to include return request, Column 5, Lines 3-18) from said controller operative to return said source to said first transport stream (Column 4, Lines 47-51), and wherein said source is returned to said first transport stream in response to said control signal select (Column 5, Lines 3-18); receiving an additional transport stream (Column 2, Lines 51-54 state that the principles of Wine's invention apply to splicers having more than two inputs); receiving an additional control signal select (Column 2, Lines 51-54) from said controller operative to switch said source of said information flow (Column 5, Lines 28-41); switching said source to said additional transport stream (Column 2, Lines 51-54) in response to said additional control signal select; adjusting time stamp data in said output stream (the selected first stream would become the output stream of the splicer, which would end up containing updated time stamp data, Column 5, Lines 28-41) to maintain said continuous time base for said information flow (Column 5, Lines 28-41); returning said source to said first transport stream (Column 5, Lines 3-18); adjusting time stamp data (Column 5, Lines 28-41) in the output stream (the selected first stream would become the output stream of the switch, which would end up containing updated time stamp data, Column 5, Lines 28-41) to maintain a continuous time base for said information flow (Column 5, Lines 28-41); splicing at least one of an audio stream, a video stream, and other information (broadly interpreted to include an ancillary data stream, Column 2, Line 59 – Column 3, Line 9) in said second transport bitstream (broadly interpreted to include said second real-time digital bitstream, Column 2, Line 50 – Column 3, Line 9) with a respective at least one of an audio stream, a video stream, and other information (Wine uses splice points with respective to video information, Column 3, Lines 4-6) in said first transport bitstream (broadly interpreted to include first real-time digital bitstream, Column 2, Line 50 - Column 3, Line 9); splicing is performed

Art Unit: 4183

without decoding said first transport stream and second transport stream (Column 10, Lines 26-46 state that time stamp info is decoded only in the selected output stream, broadly interpreted to include first transport stream or second transport stream); and each of said first time stamp and second time stamp is a program clock reference (PCR) time stamp (Column 10, Lines 26-46).

8. As for Claims 16-18, Wine discloses an apparatus for switching a source (Column 2, Lines 48-58) of an information flow (broadly interpreted to include audiovisual program, Column 2, Lines 60-64) configured for distribution among end users (broadly interpreted to include a plurality of user terminals, Column 11, Lines 21-34), comprising: a first interface for receiving a first bitstream (broadly interpreted to include first real-time digital bitstream, Figure 1); a second interface for receiving a second bitstream (broadly interpreted to include second real-time bitstream, Figure 1); a third interface for receiving control signal select (broadly interpreted to include request data, Figure 1) from a controller (broadly interpreted to include remote controller, Figure 1), said control signal select operative to switch said source of said information flow (Column 2, Lines 1-18); a splicer (broadly interpreted to include switch circuit, Figure 1) for switching said source between first bitstream and second bitstream in response to said control signal select (Figure 1); a time stamp adjustment circuit for adjusting time stamp data in a bitstream mapped to said information flow (Column 5, Lines 28-42) to provide a continuous time base therefor (Column 5, Lines 28-42); said splicer is configured to switch said source to second bitstream (Column 5, Lines 3-18) in response to a control signal select from said controller (Column 5, Lines 3-18) for an indefinite period (Column 6, Lines 1-33 discusses some scenarios that require switching transport streams), and to return said source to said first bitstream (Column 5, Lines 3-18) in response to a control signal select (Column 6, Lines 1-33) from said controller; and said splicer is configured (Column 6, Lines 1-33 discusses some

Art Unit: 4183

scenarios that require switching bitstreams) to switch said source to said second bitstream (Column 5, Lines 3-18) in response to a control signal select (Column 6, Lines 1-33) from said controller for a substitution period (Column 6, Lines 1-33 discusses some scenarios that require switching transport streams which would create a substitution period) defined by said control signal select (Column 5, Lines 3-18), and to return said source to said first bitstream (Column 5, Lines 3-18) in response to expiration of said substitution period (streams will switch upon detection or absence of an event described in Column 6, Lines 1-33, which broadly would include expiration of a substitution period).

9. As for Claims 20, 24-25, Wine discloses a distribution system for providing an information flow (broadly interpreted to include audiovisual program, Column 2, Lines 60-64) to end users (broadly interpreted to include a plurality of user terminals, Column 11, Lines 21-34), comprising: a first interface for receiving a first bitstream (broadly interpreted to include first real-time digital bitstream, Figure 1); a second interface for receiving a second bitstream (broadly interpreted to include second real-time bitstream, Figure 1); a controller (broadly interpreted to include remote controller, Figure 1) for generating control signal select (broadly interpreted to include request data, Column 5, Lines 3-18) operative to switch a source of said information flow (Column 5, Lines 3-18); a splicer (broadly interpreted to include switching device, Figure 1), coupled to said controller (Figure 1), said first interface (Figure 1), and said second interface (Figure 1), said splicer including a splicer (broadly interpreted to include switch circuit, Figure 1) for switching said source between first bitstream and second bitstream in response to said control signal select (Column 2, Lines 1-18), and a time stamp adjustment circuit for adjusting time stamp data in a bitstream mapped to said information flow (Column 5, Lines 28-42) to provide a continuous time base therefor (Column 5, Lines 28-42); said splicer is

configured to switch said source to second bitstream (Column 5, Lines 3-18) in response to a control signal select from the controller (Column 5, Lines 3-18) for an indefinite period (Column 6, Lines 1-33 discusses some scenarios that require switching transport streams), and to return said source to said first bitstream (Column 5, Lines 3-18) in response to a control signal select (Column 6, Lines 1-33) from said controller; splicer is configured to switch said source to said second bitstream (Column 5, Lines 3-18) in response to a control signal select (Column 6, Lines 1-33) from said controller for a substitution period (Column 6, Lines 1-33 discusses some scenarios that require switching transport streams which would create a substitution period) defined by said control signal select (Column 5, Lines 3-18), and to return said source to said first bitstream (Column 5, Lines 3-18) in response to expiration of said substitution period (streams will switch upon detection or absence of an event described in Column 6, Lines 1-33, which broadly would include expiration of a substitution period).

10. As for Claim 26, Wine discloses an apparatus for switching a source (Column 6, Lines 1-5) of an information flow (broadly interpreted to include audiovisual program, Column 2, Lines 60-64) to end users (broadly interpreted to include a plurality of user terminals, Column 11, Lines 21-34), comprising: means for receiving a first bitstream (broadly interpreted to include first real-time digital bitstream, Figure 1) and a second bitstream (broadly interpreted to include second real-time bitstream, Figure 1), said source being said first bitstream (Column 5, Lines 3-18); means for receiving control signal select (broadly interpreted to include request data, Column 5, Lines 3-18) from a controller (broadly interpreted to include remote controller, Figure 1) operative to switch said source of said information flow (Column 6, Lines 1-3); means for switching said source to said second bitstream in response to said control signal select (Column 5, Lines 3-18); and means for adjusting time stamp data (Column 5, Lines 28-41) in the output



Art Unit: 4183

stream (the selected second stream would become the output stream of the switch, which would end up containing updated time stamp data, Column 5, Lines 28-41) to provide a continuous time base for information flow (broadly interpreted to include audiovisual program, Column 5, Lines 28-41).

***Claim Rejections – 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Wine et al (US 6,137,834) as applied to claims 1-6, 10, 15 above, and further in view of Christofalo et al (US 2005/0015816).

14. Wine fails to disclose said request is in a format compliant with SCTE-30.

15. Christofalo discloses in the same field of endeavor a method of switching a source for an audiovisual program configured for distribution among a plurality of user terminals, comprising:

- said request is in a format compliant with DVS380 (broadly interpreted to include STCE-30, Paragraph 0018).

Christofalo discloses this difference for the purpose of providing a method which enables programmers and other content providers to provide commands to viewers' reception systems at any time, without requiring such commands or encoding directly into the programming signal in advance to the transmission (Paragraph 0026).

16. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to take the method disclosed by Wine and add to it the feature described above by Christofalo to create a method of switching a source for an audiovisual program configured for distribution among a plurality of user terminals that enables programmers and other content providers to provide commands to viewers' reception systems at any time, without requiring such commands or encoding directly into the programming signal in advance to the transmission.

17. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wine et al (US 6,137,834) as applied to claims 1-6, 10, 15 above, and further in view of Christopher Birch et al (US 2002/0154694).

18. Wine fails to disclose each of said first real-time digital bitstream and said second real-time digital bitstream comprises a live feed from a feed network; and adjusting the bit-rate of said second real-time digital bitstream for a pre-defined period in response to said splicing.

19. Birch discloses in the same field of endeavor a method of switching a source for an audiovisual program configured for distribution among a plurality of user terminals, comprising:

- each of said first bitstream (broadly interpreted to include real-time bitstream, Paragraph 0049) and said second bitstream (broadly interpreted to include real-time bit stream,

Paragraph 0049) comprises a live bitstream (broadly interpreted to include live feed, Paragraph 0049) from a digital broadcast system (broadly interpreted to include feed network, Paragraph 0010).

- adjusting the bit-rate of the output stream (broadly interpreted to include said second real-time digital bitstream, Paragraph 0048) for a pre-defined period in response to said splicing (Paragraph 0048).

Birch discloses this difference for the purpose of providing a method to simplify splicing variable-rate bit streams in such a fashion that the new bitstream will not cause overflow or underflow in the receiver (Paragraph 0048).

20. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to take the above combined methods of Wine and Christofalo and add to them the feature described above by Birch to create a method of switching a source for an audiovisual program configured for distribution among a plurality of user terminals which simplifies splicing variable-rate bit streams in such a fashion that the new bitstream will not cause overflow or underflow in the receiver.

21. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wine et al (US 6,137,834) as applied to claims 1-6, 10, 15 above, and further in view of Gardere et al (US 6,678,332).

22. Wine fails to disclose obtaining a first time stamp for said first real-time digital bitstream and a second time stamp for said second real-time digital bitstream; computing an offset using said first time stamp and said second time stamp; adding said offset to additional time stamps within said second real-time digital bitstream; identifying a first time-of-measurement for said

Art Unit: 4183

first time stamp and a second time-of-measurement for said second time stamp; and said offset is further computed using first time-of-measurement and said second time-of-measurement.

23. Gardere discloses in the same field of endeavor a method of switching a source for an audiovisual program configured for distribution among a plurality of user terminals, comprising:

- finding (broadly interpreted to include obtaining, Column 21, Lines 50-58) a  $PCR_{eL1}$  (broadly interpreted to include first time stamp, Column 21, Lines 50-58) for said first clip (broadly interpreted to include first real-time digital bitstream, Column 21, Lines 50-58) and a  $PCR_{eF2}$  (broadly interpreted to include second time stamp, Column 21, Lines 50-58) for said second clip (broadly interpreted to include second real-time digital bitstream, Column 21, Lines 50-58);
- computing an offset using first  $PCR_{eL1}$  and second  $PCR_{eF2}$  (Column 21, Lines 50-58);
- adding said offset to the PTS fields (broadly interpreted to include additional time stamps, Column 22, Lines 1-2) within said second clip (Column 22, Lines 1-2);
- finding (broadly interpreted to include identifying, Column 21, Lines 39-49) a  $PTS_{AL1}$  (broadly interpreted to include first time-of-measurement, Column 21, Lines 39-49) for said first clip and a  $PTS_{AL2}$  (broadly interpreted to include second time-of-measurement, Column 21, Lines 39-49) for said second clip; and
- wherein said offset is further computed using said  $PTS_{AL1}$  and said  $PTS_{AL2}$  (Column 21, Lines 39-49).

Gardere discloses these differences for the purpose of minimizing skew with respect to associated frames and also prevent accumulation of skew from multiple splices in the transport stream (Column 21, Lines 24-27).

24. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to take the combined methods of Wine, Christofalo, and Birch and add to them the above difference disclosed by Fardere to create a method of switching a source for an audiovisual program configured for distribution among a plurality of user terminals of that minimizes skew with respect to associated frames and also prevent accumulation of skew from multiple splices in the transport stream.

25. Claim 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Wine et al (US 6,137,834) as applied to claims 16-18 above, and further in view of Christofalo et al (US 2005/0015816).

26. Wine fails to disclose said third interface is configured to receive request data in a format compliant with SCTE-30.

27. Christofalo discloses in the same field of endeavor an apparatus for switching a source of an audiovisual program configured for distribution among a plurality of user terminals, comprising:

- third interface (Figure 4) is configured to receive a cue request message (broadly interpreted to include receive request data, Paragraph 0019) in a format compliant with DVS380 (broadly interpreted to include STCE-30, Paragraph 0019).

Christofalo discloses this difference for the purpose of providing an apparatus which enables programmers and other content providers to provide commands to viewers' reception systems at any time, without requiring such commands or encoding directly into the programming signal in advance to the transmission (Paragraph 0026).

28. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to take the apparatus disclosed by Wine and add to it the feature

described above by Christofalo to create an apparatus for switching a source of an audiovisual program configured for distribution among a plurality of user terminals that enables programmers and other content providers to provide commands to viewers' reception systems at any time, without requiring such commands or encoding directly into the programming signal in advance to the transmission.

29. Claims 21-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Wine et al (US 6,137,834) as applied to claims 20, 24-25 above, and further in view of Christofalo et al (US 2005/0015816).

30. Wine discloses said controller is configured to generate said control signal select (Column 5, Lines 3-18).

31. Wine fails to disclose generating said request data in a format compliant with SCTE-30; and said remote controller is coupled to said switching device via a transmission control protocol/internet protocol (TCP/IP) network.

32. Christofalo discloses in the same field of endeavor a distribution system for providing an audiovisual to a plurality of user terminals, comprising:

- generating said cue request message (broadly interpreted to include request data, Paragraph 0019) in a format compliant with DVS380 (broadly interpreted to include STCE-30, Paragraph 0018); and
- said server (broadly interpreted to include remote controller, Paragraph 0018) is coupled to said splicer (broadly interpreted to include switching device, Paragraph 0019) via a transmission control protocol/internet protocol (Paragraph 0019).

Christofalo discloses these differences for the purpose of providing a distribution system which enables programmers and other content providers to provide commands to viewers' reception

Art Unit: 4183

systems at any time, without requiring such commands or encoding directly into the programming signal in advance to the transmission (Paragraph 0026).

33. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to take the distribution system disclosed by Wine and add to it the features described above by Christofalo to create a distribution system for providing an audiovisual to a plurality of user terminals for the purpose of enabling programmers and other content providers to provide commands to viewers' reception systems at any time, without requiring such commands or encoding directly into the programming signal in advance to the transmission.

34. Claim 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Wine et al (US 6,137,834) as applied to claims 20, 24-25 above, and further in view of Christopher Birch (US 2002/0154694).

35. Wine fails to disclose each of said first real-time digital bitstream and said second real-time digital bitstream comprises a live feed from a feed network.

36. Birch discloses in the same field of endeavor a distribution system for providing an audiovisual to a plurality of user terminals, comprising:

- each of said first bitstream (broadly interpreted to include real-time bitstream, Paragraph 0049) and said second bitstream (broadly interpreted to include real-time bit stream, Paragraph 0049) comprises a live bitstream (broadly interpreted to include live feed, Paragraph 0049) from a digital broadcast system (broadly interpreted to include feed network, Paragraph 0010).

Birch discloses this difference to simplify splicing variable-rate bit streams in such a fashion that the new bitstream will not cause overflow or underflow in the receiver (Paragraph 0048).

Art Unit: 4183

37. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to take the above combined distribution systems of Wine and Christofalo and add to them the feature described above by Birch to create endeavor a distribution system for providing an audiovisual to a plurality of user terminals which simplifies splicing variable-rate streams in such a fashion that the new bitstream will not cause overflow or underflow in the receiver.

### *Conclusion*

38. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent Document	Inventor	Publication
5,982,436	Balakrishnan et al	November 9, 1999
6,588,015	Eyer et al	July 1, 2003
6,611,624	Zhang et al	August 26, 2003
7,062,048	Livaditis et al	June 13, 2006
7,096,481	Forecast et al	August 22, 2006
7,292,583	Joel Shoenblum	November 6, 2007
7,305,040	Yoshinari et al	December 4, 2007

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT ROOT whose telephone number is (571)270-1960. The examiner can normally be reached on Monday to Thursday from 7:30am to 5:00pm Eastern.



Art Unit: 4183

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert Root/  
Examiner, Art Unit 4183

/Len Tran/  
Supervisory Patent Examiner, Art Unit 4183